VIRGINIA STANDARDS OF LEARNING ASSESSMENTS

Spring 2002 Released Test

GRADE 3 MATHEMATICS

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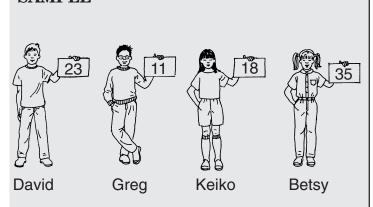
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Mathematics

DIRECTIONS

Read and solve each question. Then mark the space in the answer booklet for the best answer.

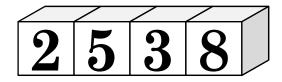
SAMPLE



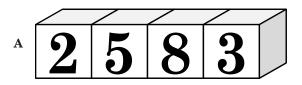
Who is holding a card with an even number on it?

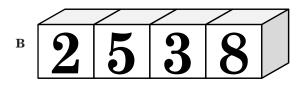
- A David
- в Greg
- c Keiko
- **D** Betsy

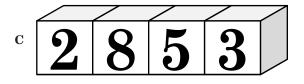
1 John made a number with the blocks shown below.

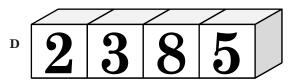


Sonya used the same blocks to make a number LESS THAN John's number. Which could be the number Sonya made?



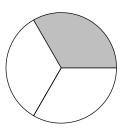


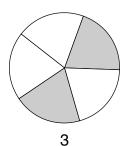




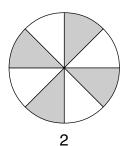
- 2 Last February, a card shop sold two hundred thousand, one hundred greeting cards. Which shows this number?
 - **F** 2,000,100
 - G 200,100
 - н 20,100
 - **J** 2,100
- 3 Harold can use the fact, $3 \times 4 = 12$, to help him solve a related problem. Which of the following could be the problem he is trying to solve?
 - $\mathbf{A} \quad \boxed{} \div 3 = 4$
 - $\mathbf{B} \quad \boxed{ } -4 = 12$
 - c + 3 = 4
 - $\mathbf{p} 3 = 4$

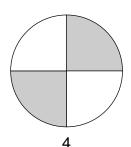
4





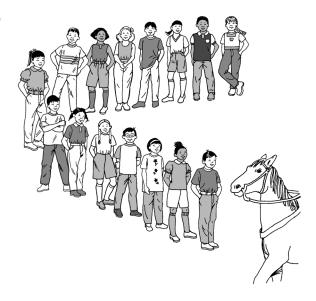
1



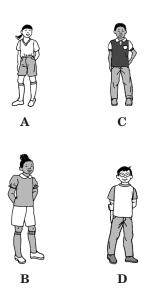


Which two figures have an equal fraction shaded?

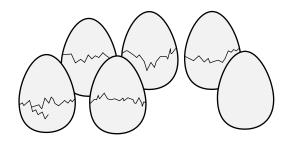
- **F** 1 and 2
- **G** 1 and 3
- н 2 and 4
- **J** 3 and 4



Who is 14th in line from the pony?

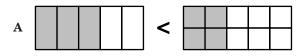


6 What fraction of the group of eggs is cracked?

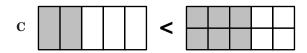


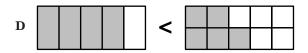
- $\mathbf{F} = \frac{1}{6}$
- $G = \frac{5}{6}$
- $H = \frac{5}{1}$
- $\mathbf{J} = \frac{6}{5}$

7 Each figure below is shaded to represent a fraction. Which pair of figures makes a statement that is true?

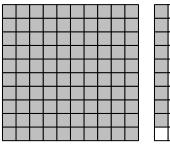


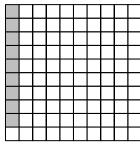






8 What number is represented by the shaded part of the figure below?





F 0.19

G 1.09

н 1.19

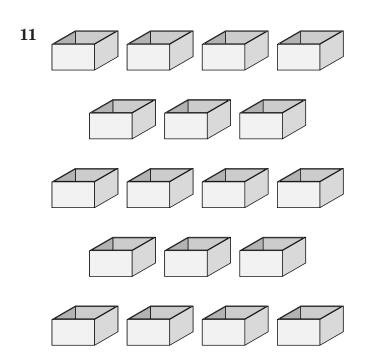
J 2.09

- 9 A school library has 985,720 books. Which of the following is that number written in words?
 - A Nine hundred eighty-five, seven hundred twenty
 - B Nine hundred thousand, seven hundred twenty
 - C Nine hundred eighty-five thousand, seven hundred twenty
 - **D** Nine thousand eighty-five, seven hundred twenty



There are 368 buttons in a jar. What is that number rounded to the nearest hundred buttons?

- **F** 300
- **G** 360
- н 370
- **J** 400



Ben put 5 cookies in each box for the bake sale. How many cookies did he use in all?

- **A** 18
- **B** 45
- c 90
- **D** 95

12 Going from left to right, in which group is the heart in the last position?





















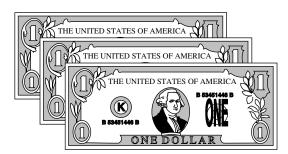






- 13 A news story reported that 713,298 people watched the play-off game. What is the value of the 3 in 713,298?
 - **A** 300
 - в 3,000
 - c 30,000
 - **D** 300,000

14 Ronnie has the money shown below.





If the prices shown include tax, which of the following shirts can Ronnie buy with this money?









15 The chart shows the number of rocks each student collected during a field trip.

Name	Number of Rocks Collected
Karla	19
Jeff	15
Mark	27
Shauna	18

How many rocks did Jeff and Mark collect all together?

- **A** 32
- **B** 42
- c 45
- **D** 79

$$16 7 \times 8 =$$

- **F** 56
- G 54
- н 32
- **J** 15

17 This is a whole.



How much is



- $\mathbf{A} = \frac{1}{4}$
- $\mathbf{B} \quad \frac{4}{5}$
- $c = \frac{6}{4}$
- $\mathbf{D} \quad \frac{4}{6}$
- 18 Sara bought 3 boxes of crackers.

 There were 48 crackers in each box.

 How many crackers did she buy in all?
 - **F** 45
 - G 51
 - н 124
 - **J** 144

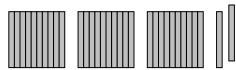
19 This is one.

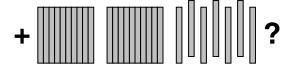


This is one-tenth.



What is



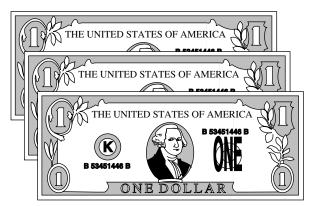


A 1.5

?

- **B** 3.9
- c 5.9
- **D** 9.5
- 20 Lisa learned that the Caribbean Sea is 8,173 feet deep and the Black Sea is 3,826 feet deep. How many feet deeper is the Caribbean Sea than the Black Sea?
 - **F** 5,753
 - G 5,357
 - н 4,947
 - **J** 4,347

21 Mr. Colton paid Alice the money shown for shoveling the snow from his sidewalk.

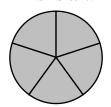




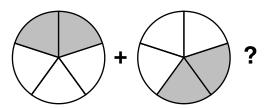
What is the total value of the money?

- A \$3.95
- в \$4.16
- c \$4.95
- р \$6.15
- $22 \ 36 \div 4 =$
 - **F** 6
 - **G** 7
 - н 8
 - **J** 9

23 This is a whole.



What is



- $\mathbf{A} \quad \frac{1}{5}$
- $\frac{4}{5}$
- $c = \frac{5}{4}$
- **D** $\frac{9}{5}$

24

Mrs. Waters bought 2 crates of apples. Each crate weighed exactly 45 pounds. What was the total weight of 2 crates?

Which of the following number sentences can be used to solve the problem above?

$$\mathbf{F} \ 2 + 45 =$$

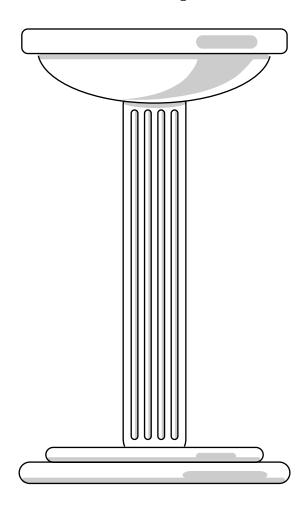
$$\mathbf{G} \ 45 - 2 = \boxed{}$$

$$\mathbf{H} \ 2 \times 45 = \boxed{}$$

J
$$45 \div 2 =$$

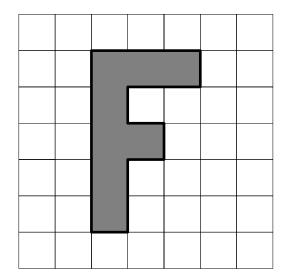
25 Use your centimeter ruler to help you answer this question.

Which is CLOSEST to the height of the birdbath in the picture below?



- A 13 centimeters
- **B** 12 centimeters
- c 11 centimeters
- **D** 10 centimeters

26 Each small square on the grid is 1 square unit.



How many square units are needed to make the shaded figure shown on the grid?

- **F** 7
- **G** 8
- н 15
- **J** 18

27 Which is a model of a rectangular solid?

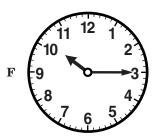


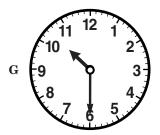


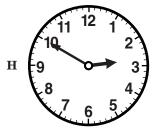


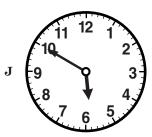


28 Rob said that the time was 10:30. Which of the following clocks shows closest to 10:30?

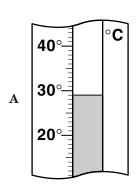


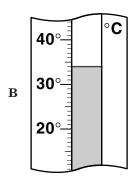


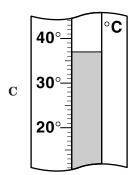


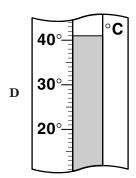


29 Which of the following thermometers shows closest to 37 degrees Celsius?

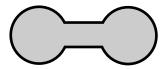








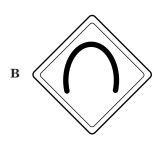
30 How many lines of symmetry does the figure below have?

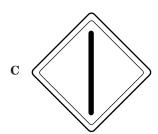


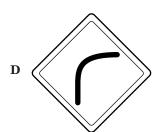
- **F** 1
- **G** 2
- **H** 4
- **J** 6

31 Each of the street signs below shows a different kind of road.
Which sign shows a road that is the BEST model of a line segment?

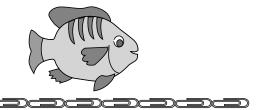








32



The length of the fish from nose to tail is closest to —

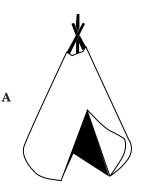
- F 2 paper clips
- G 3 paper clips
- н 5 paper clips
- J 8 paper clips
- 33 Which is CLOSEST to the amount of water Shelby's watering can will hold when full?

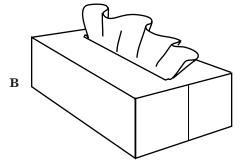


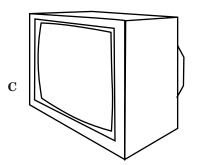
- A 1 gram
- в 1 pint
- c 1 cup
- D 1 gallon

- 34 On Saturday, Tad took exactly 60 minutes to finish his chores. How many hours did it take Tad to do his chores?
 - **F** 1
 - **G** 2
 - н 3
 - **J** 4

35 Which of the following is shaped most like a cylinder?

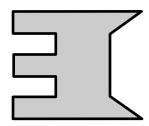




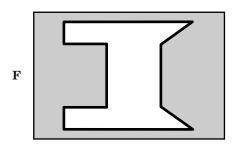


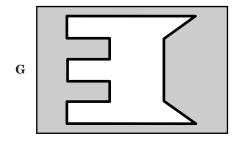


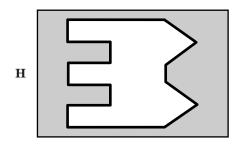
36 Wayne cut this shape out of a piece of paper.

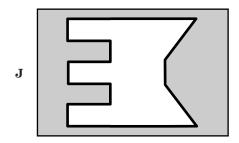


Which of the following is missing a piece exactly the same size and shape as the piece shown above?









37 The table below shows the different colors and kinds of shirts that a club member can choose from.

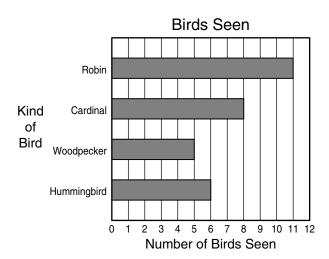
Shirt Choices

Color	Kind of Shirts
Green	T-shirt
White	Tank top
	Sweatshirts

Which of the following lists all the different ways to combine 1 color and 1 kind of shirt?

- A Green, T-shirt Green, Tank top Green, Sweatshirt White, T-shirt White, Tank top White, Sweatshirt
- B Green, T-shirt Green, Tank top White, Tank top White, Sweatshirt
- Green, Tank topGreen, SweatshirtWhite, T-shirtWhite, Tank topWhite, Sweatshirt
- D Green, T-shirt Green, Sweatshirt White, Tank top White, Sweatshirt

38 The bar graph shows the number of different kinds of birds that Karen saw at her bird feeder last week.



How many more robins than woodpeckers did she see?

- **F** 11
- **G** 6
- н 5
- **J** 3

39 The picture graph shows the numbers of 4 different kinds of plants Mr. Swan bought Saturday.

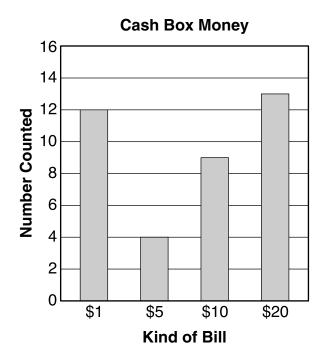
Plants Bought

Kind of Plant	Number Bought		
Peppers			
Tomatoes			
Beans			
Carrots			

How many pepper plants did Mr. Swan buy?

- **A** 15
- **в** 10
- c 8
- **D** 3

40 The bar graph below shows the number of each kind of bill that Kim counted.



How many \$10 bills did Kim count?

- **F** 4
- **G** 5
- н 9
- J 11

41 The picture graph shows the number of children who came to story hour each week.

Story Hour Attendance

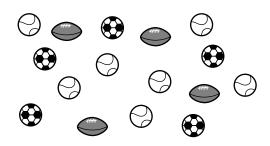
Week	Number of Children
1	
2	
3	
4	
5	

KEY: = 3 children.

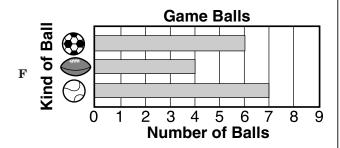
How many children came to story hour in week 4?

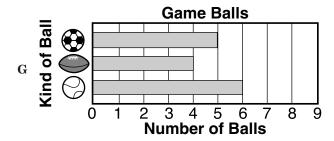
- A 5
- **B** 8
- c 12
- **D** 15

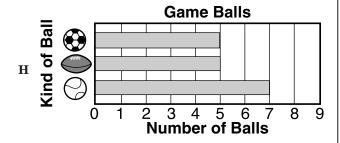
42 These are the game balls Coach Warner used for P.E. class.

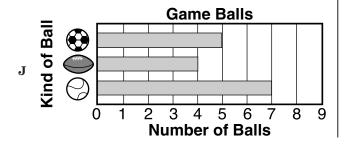


Which graph shows the correct number of each kind of game ball?

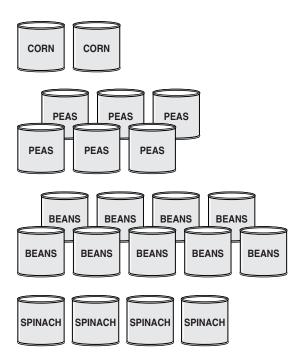








43 Louis bought these cans of food.



If Louis picks one can from the bag without looking, which kind of can is he LEAST LIKELY to pick?









44 Look at the pattern of shapes below.



If the pattern continues in the same way, what will be the next shape?









45 The table below shows the number of paddles Mr. Watson must order for different numbers of canoes.

Number of Canoes	2	4	6	8	10
Number of Paddles	4	8	12	16	?

If the pattern in the table continues, how many paddles must be ordered for 10 canoes?

- A 17
- **B** 18
- c 20
- **D** 23
- 46 Lexi had 6 fish in her fish tank. Her dad bought her some more fish.

 After that, Lexi had 14 fish in her tank. How many fish did Lexi's dad buy for her?
 - **F** 8
 - **G** 9
 - н 12
 - **J** 20

47 The table below shows the cost of different numbers of rulers.

Ruler Costs

Number of Rulers	Total Cost
1	25¢
2	50¢
3	75¢
4	\$1.00
5	\$1.25
6	?

If the pattern in the table continues, what will 6 rulers cost?

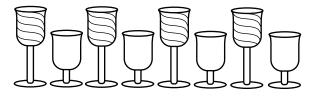
- A \$1.30
- в \$1.50
- c \$1.75
- **D** \$2.00
- 48 The table below shows the times that the train leaves from each station.

Station	Time
Westin	5:00
Lee	5:06
Carson	5:12
Burr	5:18
Madison	

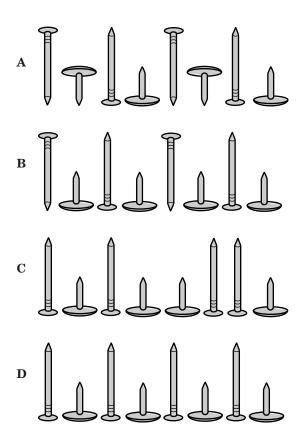
If the pattern continues, what time will the train leave the Madison station?

- F 5:19
- G 5:20
- н 5:24
- **J** 5:26

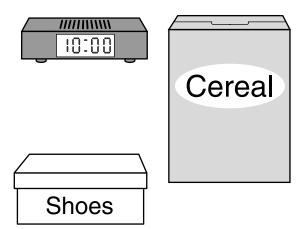
49 Look at the pattern of shapes below.



Which of the following shows the same kind of pattern?



50 Look at the group of objects below.



Which of the following <u>best</u> <u>describes</u> how these objects are alike?

- F Color
- G Size
- н Shape
- J Height

Answer Key

Test Sequence	Correct Answer	Reporting Category	Reporting Category Description
1	D	006	Number and Number Sense
2	G	006	Number and Number Sense
3	A	006	Number and Number Sense
4	Н	006	Number and Number Sense
5	C	006	Number and Number Sense
6	G	006	Number and Number Sense
7	С	006	Number and Number Sense
8	G	006	Number and Number Sense
9	C	006	Number and Number Sense
10	J	006	Number and Number Sense
11	C	006	Number and Number Sense
12	Н	006	Number and Number Sense
13	В	006	Number and Number Sense
14	J	007	Computation and Estimation
15	В	007	Computation and Estimation
16	F	007	Computation and Estimation
17	D	007	Computation and Estimation
18	J	007	Computation and Estimation
19	C	007	Computation and Estimation
20	J	007	Computation and Estimation
21	C	007	Computation and Estimation
22	J	007	Computation and Estimation
23	В	007	Computation and Estimation
24	H	007	Computation and Estimation
25	В	008	Measurement and Geometry
26	G	008	Measurement and Geometry
27	D	008	Measurement and Geometry
28	G	008	Measurement and Geometry
29	C	008	Measurement and Geometry
30	G	008	Measurement and Geometry Measurement and Geometry
31	C	008	Measurement and Geometry Measurement and Geometry
32	G	008	Measurement and Geometry Measurement and Geometry
33	D	008	Measurement and Geometry Measurement and Geometry
34	F	008	Measurement and Geometry
35	D	008	Measurement and Geometry Measurement and Geometry
36	G	008	†
			Measurement and Geometry
37	A G	009	Probability and Statistics
38		009	Probability and Statistics
39	A	009	Probability and Statistics
40	Н	009	Probability and Statistics
41	D	009	Probability and Statistics
42	J	009	Probability and Statistics
43	A	009	Probability and Statistics
44	F	010	Patterns, Functions, and Algebra
45	С	010	Patterns, Functions, and Algebra
46	F	010	Patterns, Functions, and Algebra
47	В	010	Patterns, Functions, and Algebra
48	Н	010	Patterns, Functions, and Algebra
49	D	010	Patterns, Functions, and Algebra
50	Н	010	Patterns, Functions, and Algebra